

was repeated. On examining the nest I found four fine young Cuckoos."

Of *O. edolius* he writes, "calls frequently during the night, particularly about 9 or 10 o'clock. I have found their eggs and young in the nests of the Small Butcher-bird (*Lanius silens?*)."

This is also pretty good testimony of the distinctness of the two species.

4. On a Collection of Lepidoptera from Cape York and the South-east Coast of New Guinea. By ARTHUR G. BUTLER, F.L.S., F.Z.S., &c.

[Received May 15, 1877.]

In the 'Annals and Magazine of Natural History' for last year I published an account of the first collection of Lepidoptera sent home by the Rev. J. S. Macfarlane; it contained thirty-nine species, of which six were described as new to science.

The present collection contains fifty species; but one of them is too much rubbed for specific determination. The new species are nine in number, five of them being Butterflies and four Moths, as follows:—

- Euplœa occulta.* New Guinea.
Tenaris onesimus. New Guinea.
Lycæna conformis. Cape York.
Terias sana. Cape York.
Papilio macfarlanei. New Guinea.
Chærocampa celata. Cape York.
Euchromia æmulina. Cape York.
Hydata spectabilis. Cape York.
Cryptophasa russata. Cape York.

Of species previously recorded, the most striking is a female of the rare and handsome "*Euplœa*" *mesocala* of Vollenhoven.

In the arrangement of the species I shall follow my previous list (Ann. & Mag. Nat. Hist. S. 4, vol. xviii. pp. 122-128), and that on Lepidoptera from Port Moresby (*l. c.* pp. 240-249).

RHOPALOCERA.

Family NYMPHALIDÆ.

Subfamily DANAINÆ, Bates.

Genus DANAIS, Latreille.

1. DANAIS ARCHIPPUS.

Papilio archippus, Fabricius, Ent. Syst. iii. 1, p. 49 (1793).

Several examples.

Cape York.

2. DAN AIS AFFINIS.

Papilio affinis, Fabricius, Syst. Ent. p. 511 (1775).

Common.

Cape York.

3. DAN AIS HAMATA.

Euplœa hamata, Macleay, King's Surv. Austr. ii. p. 451 (1827).

Several examples.

Cape York.

Genus EUPLŒA, Fabricius.

4. EUPLŒA ANGASII.

Euplœa angasii, Felder, Reise der Nov., Lep. ii. p. 343 ("1865").

One specimen.

Cape York.

5. EUPLŒA MŒSTA.

Euplœa mæsta, Butler, P. Z. S. p. 284, fig. 3 (1866).

♂, ♀. Several examples.

New Guinea.

This is the first occasion on which I have seen the female.

6. EUPLŒA OCCULTA, n. sp.

♂. Primaries blue-black, becoming brown upon the outer border; secondaries with the anterior half of the wings, excepting the costal area, which is whitish, dull black, bounded behind by dark castaneous brown, which shades off into pale brown at the anal area; the anal area crossed by four indistinct paler spots, forming an abbreviated discal series: body above black; wings below altogether paler, the borders being broadly brown; primaries with a white dot near the base of second median interspace; secondaries with two white spots at the base, one in the cell, and four in an oblique series just beyond it, the latter slightly lilacine in tint: pectus black, white-spotted, venter greyish, anal segments with central longitudinal white spots. Expanse of wings 3 inches 7 lines.

One specimen.

New Guinea.

At first sight *E. occulta* might be mistaken for a large example of *E. mæsta*; but the absence of the two characteristic sericeous streaks on the primaries at once distinguishes it. It is in fact more nearly allied to *E. æthiops*; but its deeper coloration, broader wings, the paler anal area of secondaries crossed by still paler spots, and the absence of many of the spots on its under surface prove its distinctness.

Genus CALLIPLŒA, Butler.

7. CALLIPLŒA MESOCALA.

Euplœa mesocala, Vollenhoven, Tijd. voor Ent. 1873, p. 244, pl. xi. figs. 1, 2.

♀.

New Guinea.

Originally described from examples obtained at Waigion: Mr. Macfarlane's example is unfortunately a good deal rubbed, as though it had struggled in the net.

Subfamily SATYRINÆ, Bates.

Genus MYCALESIS, Hübner.

8. MYCALESIS FLAGRANS.

Mycalesis flagrans, Butler, Ann. & Mag. Nat. Hist. S. 4, vol. xviii. p. 243. n. 11 (1876).

Two examples.

New Guinea.

Genus YPTHIMA, Hübner.

9. YPTHIMA ARCTOUS.

Papilio arctous, Fabricius, Syst. Ent. p. 489. n. 202 (1775).

Several specimens.

Cape York.

Subfamily MORPHINÆ, Butler.

Genus TENARIS, Hübner.

10. TENARIS ONESIMUS, n. sp.

♀. Primaries smoky brown, the apex and costa being darkest; a broad white patch enclosed between the subcostal and second median veins, and just impinging upon the end of the discoidal cell; secondaries white, tinted with ochraceous towards the base; the costa and a broad outer border smoky brown; thorax dark brown, whitish behind, palpi with black upper margin, otherwise ochreous; abdomen ochreous: primaries below as above; secondaries white, the veins, base, costa, and apical half of outer margin smoky brown; two large black ocelli, pupillated with white, adorned internally with a slender greyish crescent, with broad ochreous iris and narrow brown zone, one of them apical, the other upon the first median interspace, near the outer margin; pectus dark brown, venter ochreous. Expanse of wings 4 inches 7 lines.

One specimen.

New Guinea.

Subfamily NYMPHALINÆ, Bates.

Genus DOLESCHALLIA, Felder.

11. DOLESCHALLIA AUSTRALIS.

Doleschallia australis, Felder, Reise der Nov. Lep. iii. pl. 51. figs. 1, 2 (1867).

One example.

Cape York.

Genus NEPTIS, Fabricius.

12. NEPTIS MORTIFACIES.

Neptis mortifacies, Butler, Trans. Ent. Soc. 1875, p. 5.

Several females.

Cape York.

13. NEPTIS LATIFASCIATA.

Neptis latifasciata, Butler, Trans. Ent. Soc. 1875, p. 4.

One male.

Cape York.

Genus *DIADEMA*, Boisduval.14. *DIADEMA VELLEDA*.

Papilio vellea, Cramer, Pap. Exot. pl. 349. figs. C, D (1782).

A series of both sexes. ? New Guinea.

In the present consignment there are no specimens of the true *Diadema alimena*; I am therefore strongly inclined to believe that *D. vellea* is a good species confined to Southern New Guinea, and that the example previously noted (Ann. & Mag. ser. 4, vol. xviii. p. 124) was taken there, and not at Cape York: the habitat is not indicated.

Genus *CETHOSIA*, Fabricius.15. *CETHOSIA IMPERIALIS*.

Cethosia imperialis, Butler, Ann. & Mag. Nat. Hist. S. 4, vol. xviii. p. 124. n. 15 (1876).

One example. Cape York.

Genus *JUNONIA*, Hübner.16. *JUNONIA ALBICINCTA*.

Junonia albicincta, Butler, Trans. Ent. Soc. 1875, p. 5.

One dwarfed example. Cape York.

Genus *MESSARAS*, Doubleday.17. *MESSARAS TURNERI*.

Messaras turneri, Butler, Ann. & Mag. Nat. Hist. S. 4, vol. xviii. p. 244. n. 17 (1876).

One dwarfed example. New Guinea.

Family *LYCÆNIDÆ*.Subfamily *LYCÆNINÆ*, Butler.Genus *LYCÆNA*, Fabricius.18. *LYCÆNA CONFORMIS*, n. sp.

Above brown distinctly shot with violet, excepting the costal and external borders, which are rather broadly olive-brown, fringe rather paler; body blackish: wings below sordid whitish; outer margin bordered by a slender black line; discocellulars and a submarginal series of spots, behind which is a series of lunules, brown; primaries with a dot in the cell, a second subcostal, and an arched discal series of six spots, black; secondaries with an irregular series of spots (encircling the discocellular litura from a short distance) formed of two lines, the first crossing the cell, the second forming an arc across the disk, all black; the whole of the spots on the under surface margined with pure white; body below white. Expanse of wings 10 lines.

One example. Cape York.

Allied to *L. lysizone*.

Genus DANIS, Fabricius.

19. DANIS TAYGETUS.

Lycæna taygetus, Felder, Reise der Nov. Lep. ii. p. 321, pl. 33. figs. 19-21 ("1865").

One imperfect example.

Cape York.

Family PAPILIONIDÆ.

Subfamily PICRINÆ, Bates.

Genus DELIAS, Hübner.

20. DELIAS INFERNA.

Delias inferna, Butler, Lep. Exot. p. 63, pl. 24. fig. 6 (1871).

One shattered female.

Cape York.

Genus TERIAS, Swainson.

21. TERIAS HECABE.

Papilio hecabe, Linnæus, Mus. Lud. Ulr. p. 249 (1764).

Several examples.

Cape York.

22. TERIAS ZORAIDE.

Terias zoraide, Felder, Reise der Nov. Lep. ii. p. 213. n. 229 ("1865").

Several examples.

Cape York.

23. TERIAS SANA, n. sp.

Sulphur-yellow; primaries above with the base slightly dusted with black scales; costal border (excepting at base), apical area, outer border to the first median branch and the margin beyond it dark brown; the border runs a short distance up each of the median branches, giving its internal edge a subsinuated appearance; secondaries with a black-brown border, beginning rather narrow at apex, and rapidly tapering off to a fine line, which terminates at the first median branch: body above black, below yellow; under surface of wings unspotted. Expanse of wings 1 inch 3 lines.

Two specimens.

Cape York.

Most nearly allied to *T. venata* from India, but smaller, with narrower outer border, and unspotted under surface.

Genus BELENOIS, Hübner.

24. BELENOIS NABIS.

Pieris nabis, Lucas, Rev. Zool. p. 326 (1852).

Two examples.

Cape York.

Subfamily PAPILIONINÆ, Bates.

Genus ORNITHOPTERA, Boisduval.

25. ORNITHOPTERA PRONOMUS.

Papilio pronomus, G. R. Gray, Cat. p. 2, pl. 1. figs. 1 & 2 (1852).

Seventy specimens of both sexes.

Cape York.

Genus PAPILIO, Linnæus.

26. PAPILIO ADRASTUS.

Papilio adrastus, Felder, Reise der Nov. Lep. i. p. 110, pl. 16. figs. a, b (1865).

Several of both sexes.

New Guinea.

27. PAPILIO PANDION.

Papilio pandion, Wallace, Trans. Linn. Soc. xxv. p. 56. n. 72 (1865).

One female (like *P. onesimus*, but smaller).

New Guinea.

This female appears to be modified in imitation of *Tenaris*.

28. PAPILIO POLYDORUS.

Papilio polydorus, Linnæus, Syst. i. 2, p. 746 (1767).

Forty-eight specimens, of both sexes.

Cape York.

29. PAPILIO CHOREDON.

Papilio choredon, Felder, Verh. zool.-bot. Ges. xiv. p. 306 (1864).

One example.

Cape York.

30. PAPILIO MACFARLANEI, n. sp.

Wings above black, spotted and banded with green, according to the general pattern of *P. agamemnon*, but the central series of spots enlarged so as to form a broad tapering macular band on the primaries, and a wedge-shaped band (white on costal area) on the secondaries; the submarginal spots and the discal spots of secondaries smaller than in *P. agamemnon*: primaries below differing in the same way as above, but the secondaries with very different basal area, more nearly resembling that of *P. telephus*, pale green with a broad brown belt parallel to the abdominal margin, and a short tapering streak (from the costa to the subcostal nervure) interrupted upon the costal nervure by a scarlet spot, and terminating in a smaller scarlet spot; a few scarlet scales near the base of the interspace enclosed by the subcostal branches, and a scarlet spot above the black anal spot; no trace of the conspicuous white costal spot invariably found in *P. agamemnon*, or of the scarlet-edged black spot which precedes it. Expanse of wings 3 inches 9 lines.

Two specimens (rather worn).

New Guinea.

Intermediate in character between *P. wallacei* and the succeeding species. We have a *Papilio* scarcely differing from it, from Ternate.

31. PAPILIO ÆGISTUS.

Papilio ægistus, Linnæus, Syst. Nat. i. 2, p. 754. n. 48 (1766).

Two shattered examples.

New Guinea.

32. PAPILIO INDICATUS.

Papilio indicatus, Butler, Ann. & Mag. Nat. Hist. ser. 4, vol. xviii. p. 248. n. 29 (1876).

Several worn specimens.

New Guinea.

Genus EURYCUS, Boisduval.

33. EURYCUS CRESSIDA.

Papilio cressida, Fabricius, Syst. Ent. p. 448 (1775).

Several specimens of both sexes.

Cape York.

34. EURYCUS TROILUS.

♂ *Eurycus troilus*, Butler, Ann. & Mag. Nat. Hist. ser. 4, vol. xviii. p. 247. n. 27 (1876).

Two or three worn specimens.

New Guinea.

The female chiefly differs from that sex of *E. cressida* in its more rounded wings and less-defined markings.

HETEROCERA.

Family SPHINGIDÆ.

Subfamily CHÆROCAMPINÆ, Butler.

Genus CHÆROCAMPA, Duponchel.

35. CHÆROCAMPA CELATA, n. sp.

♂ Primaries above pale sandy brownish, clouded with pale brownish, olivaceous at the base and across the end of the cell to inner margin; the whole wing, but especially the external area, sprinkled with black and grey scales; an ill-defined greyish elbowed line crossing the wing at the basal fourth, a second greyish line crossing the wing obliquely from apical third of costa to middle of inner margin; traces of two parallel lines beyond the latter, followed immediately by a strongly defined dark brown line from the apex to the inner margin: secondaries buff-coloured, the costal area silky testaceous; a broad dull-black belt almost covering the basal half of the wing: body above pale pinky brownish, becoming gradually olivaceous towards the head; the head and thorax with well-defined pinky white borders. Wings below sandy ochraceous, sprinkled with greenish-grey scales, and crossed by two parallel greenish-grey oblique streaks, the outer one less defined than the inner; body below pinky whitish or pale flesh-coloured, the hinder part of the pectus being palest. Expanse of wings 3 inches 4 lines.

One example.

Cape York.

Most nearly allied to *C. bistrigata*.

Family AGARISTIDÆ.

Genus AGARISTA, Leach.

36. AGARISTA NEPTIOIDES.

Agarista neptioides, Butler, Ann. & Mag. Nat. Hist. xv. p. 138 (1875).

A single male.

Cape York.

Family ZYGENIDÆ.

Subfamily EUCHROMINÆ, Butler.

Genus EUCHROMIA, Hübner.

37. EUCHROMIA IRUS.

Sphinx irus, Cramer, Pap. Exot. iv. p. 150, pl. 368. fig. A (1782).

Several examples.

Cape York.

38. EUCHROMIA ÆMULINA, n. sp.

Wings above black; primaries with two metallic green spots at the base; a spot near the base, a bifid spot across the median vein, an elongated subcostal spot beyond the cell, and a bifid spot across the second median branch hyaline white: secondaries with the costa brown; a trifid basal spot and a large trifid spot beyond the cell hyaline white: body dark brown; shoulders, front of collar, and meta-thorax ochreous; hind margins of abdominal segments ochraceous in front, carmine towards the anus; vertex of head white; hinder part of shoulders, collar, inner margins of tegulæ, hind margin of meta-thorax, and three spots on the basal segments of the abdomen opaline, varying from silvery white to green or blue; anterior coxæ white; venter carmine with a central series of black spots; anus testaceous and black. Expanse of wings 1 inch 7 lines.

One specimen.

Cape York.

This beautiful species comes nearer to *E. aruica* of Walker than to any other described form. The pattern of the wings is quite like *Syntomis*.

Subfamily SYNTOMINÆ, Butler.

Genus SYNTOMIS, Ochseneheimer.

39. SYNTOMIS MARSDENI.

Syntomis marsdeni, Moore, Proc. Zool. Soc. 1859, pl. 60. fig. 3.

Two specimens.

Cape York.

This is another instance of the same Lepidopterous insect occurring in Java and Australia.

Family ARCTIIDÆ.

Genus AREAS, Walker.

40. AREAS PUNCTIPENNIS.

Areas punctipennis, Butler, Ann. & Mag. Nat. Hist. ser. 4, vol. xviii. p. 126. n. 30 (1876).

One example.

Cape York.

Family LITHOSIIDÆ.

Genus THEMISCYRA, Walker.

41. THEMISCYRA MACTATA.

Mieza mactata, Felder, Reise der Nov. Lep. v. pl. cxxxix. fig. 44 (1876).

Themiscyra varicosa, Butler, Ann. & Mag. Nat. Hist. ser. 4, vol. xviii. p. 126. n. 31 (1876).

One example. Cape York.

My description was published a week or two too late to secure priority.

Genus ARGINA, Hübner.

42. ARGINA CRIBRARIA.

Phalæna cribraria, Clerck, Icones, pl. 54. fig. 4 (1764).

One example. Cape York.

This species seems to be common all over the Old World with the exception of Europe.

Family HYPSIDÆ.

Genus HYPSA, Hübner.

43. HYPSA DAMA.

Noctua dama, Fabricius, Sp. Ins. ii. p. 216 (1781).

One example. Cape York.

Genus DAMALIS, Hübner.

44. DAMALIS ALCIPHRON.

Phalæna alciphron, Cramer, Pap. Exot. ii. pl. 133. fig. F (1779).

One example. Cape York.

Family CHALCOSIIDÆ.

Genus HELEONA, Swainson.

45. HELEONA FENESTRATA?

Heleona fenestrata, Swainson, Zool. Ill. pl. 116 (1832-33).

One specimen. Cape York.

The single specimen sent has the primaries so much rubbed that I cannot be certain that it is the true *H. fenestrata*; but if not, it is a nearly allied species.

Family URANIIDÆ.

Genus NYCTALEMON, Dalman.

46. NYCTALEMON PATROCLUS.

Papilio patroclus, Linnæus, Mus. Lud. Ulr. p. 204 (1764).

One shattered female. New Guinea.

Family MACARIIDÆ.

Genus HYDATA, Walker¹.

47. HYDATA SPECTABILIS, n. sp.

Wings hyaline white; above with a broad pale brown or sordid cream-coloured outer border: primaries strongly falcated, sinuated

¹ A genus agreeing in venation with *Macaria*, but with transparent wings, the secondaries not angulated or caudated, but sinuated.

